

Notice of Allowability	Application No.	Applicant(s)	
	09/854,463	HANNUKSELA ET AL.	
	Examiner	Art Unit	
	Erick Rekstad	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Amendment filed March 2, 2005.
2. ☒ The allowed claim(s) is/are 1, 2 and 15-62.
3. ☒ The drawings filed on 15 May 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.
THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|--|
| <ol style="list-style-type: none"> 1. <input type="checkbox"/> Notice of References Cited (PTO-892) 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) 3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | <ol style="list-style-type: none"> 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ 7. <input type="checkbox"/> Examiner's Amendment/Comment 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance 9. <input type="checkbox"/> Other _____ |
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CHRIS KELLEY

**SUPERVISORY PATENT EXAMINER
 TECHNOLOGY CENTER 2600**

DETAILED ACTION

This is an allowance for application no. 09/854,463 in response to the amendment filed on March 2, 2005 in which claims 1-2 and 15-62 are presented for examination.

Allowable Subject Matter

The following is an examiner's statement of reasons for allowance:

The claims pertain to a novel methods and apparatuses for coding and decoding video that the examiner was unable to find in several prior art searches.

In regards to claims 1 and 2, US Patent 5,410,553 to Choon teaches the use of the frame type to determine which type of error concealment method to use (Col 2 Lines 34-43, Col 5 Lines 5-25, Fig. 5). Choon further teaches the use of the error concealing method used in a decoder (Col 4 Lines 41-63, Col 7-Col 8, Fig. 4). Choon further teaches the uses of the error concealing method for block-based video coding systems such as MPEG. Choon does not teach how the frame type is decided.

US Patent 6,351,493 to Reed et al. teaches a scene change detecting method, which codes a frame as an I-frame when the difference between two frames is above a threshold in order to prevent the propagation of quantization artifacts (Col 3 Lines 11-35, Col 4 Lines 24-30, Col 5 Lines 44-45, Fig. 2). Reed further teaches the use of the scene change detection method in video coding schemes such as MPEG-1, MPEG-2 and H.263 (Col 3 Lines 50-53). It would have been obvious to one of ordinary skill in the art at the time of the invention to combine the encoder of Reed with the decoder of

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Choon as both are used for MPEG coding scheme. Reed further teaches the including of the frame type in the header as required by claim 3 (Col 3 Lines 63-65).

Reed further teaches the indicator (frame type) is updated when the measure of similarity does not meet the predetermined criterion of similarity (number of non-intra coded macroblocks) (Col 5 Lines 39-46). Reed further teaches the including of the frame type in the header (Col 3 Lines 63-65).

Choon and Reed do not teach the video signal is encoded according to the H.263 standard and the indicator (frame type) is included in the Supplemental Enhancement Information. These features taken with the others in the claims define over the prior art.

In regards to claims 15-62, Choon and Reed teach the use of the frame type as the indicator for error concealment method as shown above. Choon and Reed do not teach a separate error concealment method indicator provided in the encoded video signal as required by the independent claims 15, 21, 23, and 26. These features taken with the others in the claims define over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Erick Rekstad whose telephone number is 571-272-7338. The examiner can normally be reached on 8-5.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chris Kelley can be reached on 571-272-7331. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Erick Rekstad
Examiner *ER*
AU 2613
(571) 272-7338
erick.rekstad@uspto.gov


CHRIS KELLEY
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600